

supply means for holding the current impulse response for each sample and supplying the current impulse response to said generation means;

elimination means for subtracting said pseudo acoustic echo signal from a near-end speech signal to remove an acoustic echo component and thereby generate an acoustic echo-canceled signal for each sample;

update means for continually updating the impulse response for each sample by using said source signal, said acoustic echo-canceled signal and the current impulse response held by said supply means and for supplying the updated impulse response to said supply means;

decision means for checking, in each frame, whether or not a voice is included in the near-end speech signal, by using time domain information and frequency domain information of said acoustic echo-canceled signal;

storage means for storing one or more impulse responses in each frame; and

control means for, in a frame for which the result of a decision made by said decision means is negative, storing in said storage means the current impulse response held by said supply means and, in a frame for which the result of the decision is positive, retrieving one of the impulse responses stored in said storage means and supplying it to said supply means.

7. (Amended) A speech processing method comprising:


a generation step for generating a pseudo acoustic echo signal for each sample based on a current impulse response simulating an acoustic echo transfer path and on a source signal;

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a supply step for holding the current impulse response for each sample and supplying the current impulse response to said generation step;

an elimination step for subtracting said pseudo acoustic echo signal from a near-end speech signal to remove an acoustic echo component and thereby generate an acoustic echo-canceled signal for each sample;

 an update step for continually updating the impulse response for each sample by using said source signal, said acoustic echo-canceled signal and the current impulse response held by the supply step and for supplying the updated impulse response to said supply step;

a decision step for checking, in each frame, whether or not a voice is included in the near-end speech signal, by using time domain information and frequency domain information of said acoustic echo-canceled signal;

a storage step for storing one or more impulse responses in each frame; and

a control step for, in a frame for which the result of decision made by said decision step is negative, storing in said storage step the current impulse response held by said supply step and, in a frame for which the result of decision is positive, retrieving one of the impulse responses stored in said storage step and supplying it to said supply step.

REMARKS

This is in reply to the Examiner's Official Action dated December 31, 2002.

Claims 1-12 are currently pending. By this Amendment, claims 1 and 7 have been amended to more appropriately describe and claim the invention. The above amendment with the following remarks are submitted to be fully responsive to the

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